Statewide Data Program Needs Assessment

Watermaster Program

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Program Description

In Northern Region Office, the Watermaster program allocates surface water based on rights assigned by the State Water Resources Control Board. In Southern Region Office, the Watermaster program allocates groundwater.

Watermaster Service Areas:

Burney Creek
Cow Creek
Hat Creek
Mill Creek
North Fork of Cottonwood Creek
Scott River
Sierra Valley
Butte Creek
Digger Creek
Indian Creek
Napa River
Oak Creek
Shasta River
In Southern California, three groundwater basins

Data Needs

What do you define data?

Physical Data:

- Ideally real-time flow to facilitate the calculations of diversions based on what is available. There are certain critical locations that are needed for each watershed.
- Stage can be used, but a relationship with flow must be established.
- 15-minute data for stage and flow is ideal.
- Water temperature where biological issues are a concern.

- Surface water flow from USGS gage data
- Land & Water Use data from DWR
- Groundwater studies and data

Then there are documents:

- Decrees
- Maps
- Past correspondence
- Diversion records (for reporting to the State Board)
- Watermaster log books
- Photographs of facilities and diversions (Bill's work on Parks Creek)
- Annual reports

If any or all of this were no longer collected, it would hurt the program. The Watermaster Program would:

Start running the gage for our needs
Measure the stream manually

Both of these options make the watermaster Program less legally defensible.

Data Management

Documentation of QA/QC of available data sources.

DWR needs more standardization of data collection and management. We do this for grant protocols but internally we don't do it ourselves.

DWR needs to evaluate the water quality network.

Unmet Needs

CDEC is critical. Mobile access to CDEC is critical. Need mobile application for easier access to CDEC.

Need a way to work through the issue of private land owners who don't mind a data collection instrument on their property, but don't want the data to be public.

Weather data and predictions would be great.

Scott/Shasta watersheds need additional evaporative pan data. Existing data at Weed Airport inadequate for current need.

Additional data to better predict flow in watermaster service areas.

Apportioning Costs

There needs to be a "basic data" Program that monitors large water bodies.

The program needs surface water, groundwater level, and land and water use data. These need to be paid for somehow.

It takes about three years to generate flow curves for surface water gages. Can't be cycling gages in and out of service without an impact on the data.

Specific programs are needed to fill in the less common areas.

Make sure data collection is able to span political boundaries (Region office, county irwm, etc)

Other Issues

None mentioned that are not already discussed.